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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/716,315	WALSH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anatoly Vortman	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an Election filed on 08/27/04.
2. ☒ The allowed claim(s) is/are 16-20 (renumbered 1-5, respectively).
3. ☒ The drawings filed on 22 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>11/17/03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                               | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Applicant's election without traverse of claims 16-20 in the reply filed on 08/27/04 is acknowledged.
3. This application is in condition for allowance except for the presence of claims 1-15, 21, and 22 non-elected without traverse. Accordingly, claims 1-15, 21, and 22 have been cancelled.
4. The following is an examiner's statement of reasons for allowance:

The allowability resides in the overall structure of the device as recited in independent claims 16 and 18, and at least in part, because claim 16 recites: "(A) first and second electrical devices...each of which devices (a) having an initial resistance at 20°C of at most 6 ohms; (b) having a capacitance of at most 150pF; and (c) meeting the requirements of UL1950 power contact test M-1, and (B) an additional insulating layer which surrounds the first and second devices"; and claim 18 recites: "two laminar PTC devices electrically connected in parallel... the assembly (A) having a capacitance which is at most 300pF; (B) having an initial resistance at

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200°C which is at most 6 ohms; and (C) meeting the requirements of UL1950 power contact test M-1”.

The aforementioned limitations in combination with all remaining limitations of the respective independent claims, are believed to render said claims 16 and 18 and all claims dependent thereon patentable over the art of record.

The closest reference to the present invention is believed to be US/4,873,507 to Antonas (cited on IDS).

Antonas disclosed (Fig. 1, 2) an electrical assembly comprising a PTC device comprising a laminar PTC element (12) which is composed of a conductive polymer composition which exhibits PTC behavior, has first and second major surfaces, has a thickness  $t$  mm, and has a perimeter  $p$  mm, has a first metal electrode (14) attached to the first surface, has a second metal electrode (16) attached to the second surface, and has a first insulating layer (24) which comprises an electrically insulating material which conforms to at least part of the perimeter of the PTC element (12), but did not disclose that there are two laminar PTC devices electrically connected in parallel, wherein the assembly having a capacitance which is at most 300pF; having an initial resistance at 20°C which is at most 6 ohms; and meeting the requirements of UL1950 power contact test M-1, as required by independent claim 18, or did not disclose a first and a second electrical devices...each of which devices having an initial resistance at 20°C of at most 6 ohms; having a capacitance of at most 150pF; meeting the requirements of UL1950 power contact test M-1; and having an additional insulating layer which surrounds the first and second devices, as required by independent claim 16.

Another close to the present invention reference is US/5,382,938 to Hansson et al., (Hanson).

Hansson disclosed (Fig. 5) an electrical assembly comprising a PTC device comprising a laminar PTC element (10) which is composed of a conductive polymer composition which exhibits PTC behavior, has first and second major surfaces, has a thickness  $t$  mm, and has a perimeter  $p$  mm, has a first metal electrode (11) attached to the first surface, has a second metal electrode (12) attached to the second surface, and has a first insulating layer (30) which comprises an electrically insulating material which conforms to at least part of the perimeter of the PTC element (10), but did not disclose the assembly of two laminar PTC devices electrically connected in parallel, wherein the assembly having a capacitance which is at most 300pF; having an initial resistance at 20°C which is at most 6 ohms; and meeting the requirements of UL1950 power contact test M-1, as required by independent claim 18, or did not disclose a first and a second electrical devices...each of which devices having an initial resistance at 20°C of at most 6 ohms; having a capacitance of at most 150pF; meeting the requirements of UL1950 power contact test M-1; and having an additional insulating layer which surrounds the first and second devices, as required by independent claim 16.

The Examiner has also cited the following pertinent to the present invention references:

US/6223423, 6236302, 6540944, 6531950, 6373372, 6236302, 6157528, 5945903, 5939968, 5874885, 5303115, 4267635, EP/0534775, and DE/3632598 disclosed electrical assemblies comprising PTC devices.

None of the cited references either taken alone or in combination is believed to render the present invention unpatentable as claimed.

5. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anatoly Vortman  
Primary Examiner  
Art Unit 2835

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